

QUANTUM DOT INFRARED PHOTODETECTOR AND METHOD FOR FABRICATING THE SAME

ABSTRACT OF THE DISCLOSURE

5 A method for fabricating a quantum dot infrared photodetector by
using molecular beam epitaxy is provided. The method includes steps of
growing a first gallium arsenide layer as a buffer layer on a gallium
arsenide substrate, growing a first undoped aluminum gallium arsenide
layer as a blocking layer on the first gallium arsenide layer, growing a
10 quantum dot structure layer on the first undoped aluminum gallium
arsenide layer at a specific temperature, and growing a second gallium
arsenide layer as a contact layer on the quantum dot structure layer.